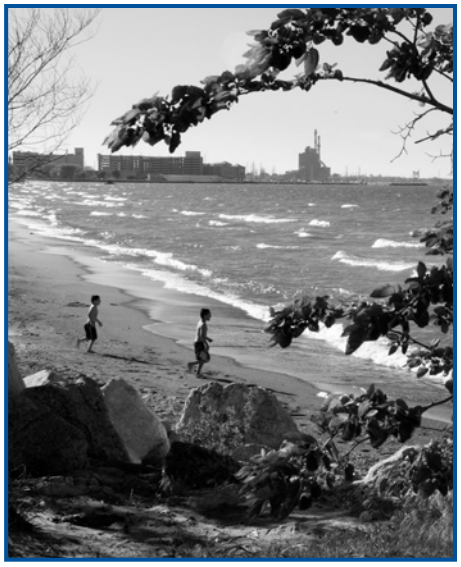
Purpose and Applicability of Regulations



The regulations and information presented in this chapter are mechanisms that protect public health and welfare and the environment from spills or releases of regulated materials. Release prevention, planning, reporting, and responses are all responsible means for accomplishing this. There are numerous state and federal regulations that apply to this chapter. You need to be prepared in the event of a release of regulated materials by knowing which requirements apply before a release occurs.

Release Prevention Tips

Using common sense and care when storing and transferring regulated materials can usually prevent releases. Tips include:

- Train all personnel in spill prevention techniques. Some regulations indicate who, at a minimum, must be trained for handling regulated material and waste.
- Practice safe loading and unloading procedures.
- Have inventory control procedures to track material from receipt to disposal.
- Post warning and instructional signs in appropriate places.
- Adequately label all containers.
- Use pumps or funnels to transfer liquids.
- Keep lids and covers on containers to control spills and evaporation.
- Use seal-less pumps.
- Install spill basins or dikes in storage areas.
- Install splash guards and drip boards on tanks and faucets.
- Use drip buckets under liquid spigots.
- Prohibit outside draining or replacement of fluids over the ground or on pavement not designed for containment.

You might also reduce the damage caused by spills if you notice them quickly. Routinely check your business for leaks and spills of materials. Some of the regulations specify how often you must monitor your business. Watch for strange odors and discoloration

or corrosion of walls, work surfaces, ceilings, and pipes. Also, note if anyone has irritation of the eyes, nose, or throat. All of these can indicate the presence of leaks or poorly maintained equipment.

Environmental Release Prevention and Response Planning

While environmental regulations do not require all businesses to develop release prevention and response plans, having one is recommended to minimize your liability and protect human health and the environment. Depending on your activities, you may be subject to several planning regulations. Each plan has specific requirements under different federal or state laws. Even if you are not required to have a written plan under the regulations described in this section, you are responsible for any release on or from your property. You may be required to report the release to different agencies and will be required to clean up the release. Release notifications and cleanup procedures would be included in plans developed voluntarily or as required by regulation.

Besides the plans discussed in this chapter, facilities may have other planning requirements in permits issued to the facility, may be subject to worker safety and health-related planning requirements, and may need to submit information to be included in the Community Emergency Response Plan required by Section 302 of SARA Title III (see Chapter 7). You should give your local fire department information about the hazardous materials kept on-site and invite them to tour your facility so they can be adequately trained and have the necessary equipment available to respond to an emergency at your facility.

One practice that is recommended in some areas to help emergency responders is to have a secure and protected box or emergency tube outside the facility that contains emergency contacts, basic facility information, facility maps, and either material safety data sheets (MSDS) or a list of potentially harmful materials on-site, including their Chemical Abstracts Service numbers. Talk to your fire department about this practice. They can provide recommendations as to what they want to have immediately available if called to the site and where they would like to have the information located. However, due to recent terrorism concerns, be cautious about the placement in regard to potential sabotage.

It is recommended that you consider what needs to be done in case of an emergency and prepare a response plan to protect yourself and the environment. Consider the following in case emergency responders are called to the facility:

- The fire department's response is based on the information you give them. Provide as much detail as possible when calling for help. Have your emergency information readily available and let them know what hazardous materials are involved, how much if known, the location of the spill, if people are inside the facility or taking some response actions, wind direction, etc.
- Have a key contact person (who is knowledgeable about the whole facility and the incident) meet the responders.

- Make sure everyone is accounted for, including both employees and visitors at the facility.
- Keep everyone upwind of the situation and, if necessary, have people move to a different location.
- Have a knowledgeable public relations person from the facility available to address media if they arrive at the scene.
- Follow the emergency responders' directions.

The following are some environmental release prevention and response plans that a manufacturer may be required to develop:

- Hazardous Waste Contingency Plan, if you have regulated amounts of hazardous waste.
- Spill Prevention, Control, and Countermeasures Plan (under the Clean Water Act), if you have regulated storage capacity of oil and a release could potentially reach navigable waters.
- Storm Water Pollution Prevention Plan, if you are subject to a storm water discharge permit.

Are you subject to the above planning requirements? Ask yourself the following questions:

- What regulated materials are on-site? (Use your MSDSs, hazardous waste manifests, and/or waste survey to identify.)
- Is the material a product, raw material, or a hazardous waste?
- How much is on-site?
- How much is stored outdoors and/or indoors?
- How long is it kept on-site?
- Is any of it on any list of regulated substances?
- Is any of it salt (sodium chloride, potassium chloride, calcium chloride, or magnesium chloride)?
- Is any material stored in regulated aboveground or underground storage tanks?
- Is any material an oil? Do you have 1,320 or more gallons total capacity? Do you have 42,000 or more gallons in an underground storage tank?
- Can a release reach navigable waters of the state either by direct discharge or via a conveyance system like drains, ditches, etc?
- What is my company's hazardous waste generator status?
- Does my company have a hazardous waste transportation, storage, and disposal facility permit?
- Is the company required to have a storm water discharge permit?
- If a release occurred, is there potential to have a situation which might have a significant impact on the waters of the state?
- What is my company's Standard Industrial Classification (SIC) code?

Spill Prevention, Control, and Countermeasures (SPCC) Plan

Your facility must comply with U.S. EPA's SPCC requirements (Title 40, Sections 112.1 through 112.7 of the Code of Federal Regulations) if both of the following conditions describe your operations:

- You own or operate a non-transportation related fixed facility that could reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines. (The definition of navigable waters includes most rivers, streams and tributaries in Indiana.)
- Your facility has a total aboveground oil storage capacity of more than 1,320 gallons; or a total underground buried storage capacity of more than 42,000 gallons. (Note that if a tank has the requisite capacity, it doesn't matter whether the tank is filled to that capacity. The SPCC rule applies regardless of the tank's contents.)

If your facility meets the SPCC criteria, you must prepare an SPCC plan and follow the other provisions of the SPCC rule. Call IDEM's Compliance and Technical Assistance Program for more guidance or view the U.S. EPA SPCC guidance manual at www.epa.gov/oem/content/spcc/index.htm.

Storm Water Pollution Prevention Plan (SWP3) for Industrial Activity: Who needs a SWP3?

Most industrial facilities in Indiana are subject to the Rule 6 permitting requirements. Rule 6 covers National Pollutant Discharge Elimination System (NPDES) general permit for storm water run-off associated with industrial activity. If your facility is subject to Rule 6, the facility representative must submit a completed Rule 6 Notice of Intent (NOI) Letter (State Form 51286). After the NOI letter is submitted, the facility representative must submit a storm water pollution prevention plan (SWP3) within 356 days from the submission date of a timely-submitted NOI letter. This SWP3 submittal certifies that the facility has completed and implemented a storm water pollution prevention plan that is consistent with the requirements of Title 327 Article 15, Rule 6, Section 7 of the Indiana Administrative Code. In addition to developing and implementing a SWP3, a facility representative must collect sampling data from the facility's representative storm water outfalls (those identified in the NOI letter).

For more information on this topic, please refer to IDEM's Web site at www.idem.IN.gov/4896.htm.

Contingency Plans for Hazardous Waste Generators

The hazardous waste regulations require large quantity and small quantity generators to be prepared in case of a fire, explosion, or release of hazardous waste, and to maintain and operate their businesses in a way that minimizes these risks. Conditionally exempt small quantity generators are not required to have a contingency plan, but are highly encouraged to also be prepared.

Basically, generators of hazardous waste are required to comply with the following:

- Have the following proper emergency equipment available and test and maintain that equipment as necessary:
  - Communication devices (phones, radios, intercom, etc.);
  - Portable fire extinguishers;
  - Spill control equipment (absorbents, containers, kits); and
  - Water for fire control in sufficient volumes.
- Have immediate access to an internal alarm system where personnel can activate an alarm within seconds, not minutes.
- Provide and maintain sufficient aisle space in the hazardous waste handling areas to ensure access of emergency equipment and emergency personnel.
- Large quantity and small quantity generators must identify one employee as the emergency coordinator who will be on-site or on call and who will coordinate all emergency response activities. It is recommended that you identify alternative coordinators to cover when the primary person is on vacation or otherwise not available. Generators must post the following next to their telephones:
  - Name and telephone numbers of the emergency coordinator and alternates;
  - Locations of fire extinguishers, alarms, and spill control material; and
  - Location of fire alarms if direct to fire department, or the telephone number of the local fire department.

Although the contingency plan provides a plan of action during and following an emergency situation, training is necessary and required to ensure that the correct actions are taken during an emergency. In addition to the training given to all personnel, the emergency coordinators should receive specialized training for this role. A crew of employees should also be specially trained to assist the emergency coordinator in dealing with an emergency.

The contingency plan must be implemented for an on-site, as well as an off-site, release that could threaten human health and the environment, even if the emergency coordinator does not believe that the wastes will leave the site. The contingency plan was designed to deal with threats to facility personnel, as well as with threats to people outside the facility.

At a minimum, the plan must map out general strategies to deal with both sudden and non-sudden events. Such strategies must involve outlining a series of steps to be taken in response to an incident and should include decision points where outside assistance may be required and the circumstances under which evacuation of the facility is advisable.

The following criteria should be used in the contingency plan implementation decision process:

The contingency plan must be implemented if an imminent or actual incident could threaten the environment or human health.

- Spills:
  - The spill could result in a release of flammable liquids or vapors, creating a fire or gas explosion hazard.
  - The spill could cause the release of toxic liquids or fumes.
  - The spill can be contained on-site but the potential exists for ground water pollution due to aquifer contamination.
  - The spill cannot be contained on-site resulting in off-site soil contamination and/or ground or surface water pollution.
- Fires:
  - The fire could cause the release of toxic fumes. If the fire spreads, it could ignite materials at other locations at the site or cause heat-induced explosions.
  - The fire could spread to off-site areas.
  - Use of water or chemical fire suppressants with water could result in contaminated run-off.
- Explosions:
  - An imminent danger exists that an explosion could occur, resulting in a safety hazard due to flying fragments or shock waves.
  - An imminent danger exists that an explosion could ignite other hazardous waste at the facility.
  - An imminent danger exists that an explosion could result in release of toxic material.

Emergency Coordinators

The facility must select at least one employee who is either on the premises during normal operational periods or is available to respond to an emergency by reaching the facility within a short period of time. This employee must be designated the primary emergency coordinator. The emergency coordinator is responsible for coordinating all emergency response measures and being thoroughly familiar with:

- The facility's contingency plan;
- All operations and activities at the facility;

- The location and characteristics of waste handled;
- The location of all records within the facility; and
- The physical layout of the facility.

The emergency coordinator must have the authority to expend funds and recruit employees to implement the contingency plan. The owner/operator should also select alternate emergency coordinators if, for some reason, the designated emergency coordinator may be unavailable. The appropriate level of response to a particular incident is largely a matter of professional judgment. However, the full range of response methods to be employed in a variety of potential situations can been anticipated and, thus, should be outlined as emergency procedures. The level of detail appropriate for these response procedures is dependent upon a number of factors including:

- The type of waste handled;
- The potential for fires, explosions, or releases;
- The immediate health and safety effect of the incident upon personnel; and
- The potential hazard to the outside environment.

Immediately upon discovery of an imminent or actual emergency, the first duty of the emergency coordinator is to warn the operating personnel, since they are likely to be the first group exposed to danger. Secondly, appropriate state or local emergency response agencies should be called if their assistance is needed to cope with the emergency.

In the event of a release, fire, or explosion, the emergency coordinator must identify the character, exact source, amount, and extent of any released material. He also must assess possible hazards to the environment and human health. The identification of the discharged material may be accomplished through observation, review of manifests, and, if necessary, by chemical analysis, although response should not be delayed until the analysis is complete.

If the release, fire, or explosion could threaten the environment or human health, the emergency coordinator must immediately notify the appropriate local authorities, and notify either the U.S. EPA on-scene coordinator for that geographical area or the National Response Center at (800) 424-8802, and the IDEM Emergency Response Section at (317) 233-7745, or (888) 233-7745 (toll free nationwide).

During the emergency control phase, the emergency coordinator must take all reasonable steps necessary to ensure that explosions and releases do not occur, recur, or spread to other hazardous waste at the facility. These steps include, where applicable, stopping operations. The emergency coordinator must monitor for leaks, pressure build-up, gas generation, or ruptures in valves, pipes, or other equipment, wherever appropriate. Details should be provided to emergency personnel concerning the types of on-site emergency equipment to be used and the need for personnel protection equipment.

Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material. The recovered material must be handled as a hazardous waste unless it is a characteristic hazardous waste only, which is analyzed and determined not to be hazardous. The emergency coordinator must ensure that in the affected areas of the facility, no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed. All emergency equipment must be cleaned and made fit for its intended use before operations are resumed.

The contingency plan must include a list of all emergency equipment at the facility, with the location of this equipment noted, and a physical description of each item on the list provided along with a brief outline of the equipment capabilities. Emergency equipment will vary from facility to facility, but must include the following, as required by the regulation, unless none of the hazards posed by waste handled at the facility could require the equipment's use:

- An internal communication or alarm system capable of providing emergency instructions;
- A device capable of summoning external assistance (telephone or two-way radio); and
- Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment.

Facility personnel will use this list during an emergency. The format for the list should, therefore, allow identification of any needed equipment and its location in the easiest possible manner. It is suggested that a plot plan showing the locations of the equipment also be included in the contingency plan.

Evacuation Plan

The contingency plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. Where no possibility exists that facility evacuation could ever be necessary, this plan element may be omitted. Situations that would warrant partial or complete evacuation are as follows:

- Explosions resulting in airborne debris including container fragments and hazardous waste;
- Spills or chemical reactions resulting in toxic fumes;
- Fire when it cannot be contained and is spreading to other parts of the facility, or when fire could generate toxic fumes; and
- All incidents where necessary protective equipment is not available to emergency response personnel.

The evacuation plan must ensure the safe egress of facility personnel. The evacuation plan must indicate a recognizable signal to start evacuation, evacuation routes, and alternate evacuation routes (in case primary exit routes are blocked by releases of hazardous waste or fires).

Required Reports

Within 15 days after an incident requiring implementation of the contingency plan, the owner or operator must submit a written report on the incident to the U.S. EPA regional administrator and the IDEM commissioner which includes:

- Name, address, and telephone number of owner/operator;
- Name, address, and telephone number of the facility;
- Date, time, and type of incident;
- Name and quantity of materials involved;
- An assessment of actual or potential hazards to human health or the environment; and
- Estimated quantity and disposition of recovered material that resulted from the incident.

Before operations are resumed in the affected areas of the facility, the owner/operator must notify the U.S. EPA regional administrator and appropriate state and local authorities that the facility is in compliance with follow-up procedures to an emergency prior to resuming operations in the affected areas.

Amendment of the Contingency Plan

The contingency plan must be reviewed, and immediately amended, whenever the following situations apply: applicable regulations are revised; the plan fails in an emergency; the facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases; the list of emergency coordinators changes; or the list to emergency equipment changes.

Remedial Response Program

IDEM's Emergency Response Section was created to handle environmental emergencies and has no mechanism for long-term remedial oversight. In 1998, it was recognized that such a mechanism was needed to address emergency response sites requiring long-term remediation. Therefore, these sites are now referred to IDEM's State Cleanup Section for evaluation, as well as management of the remediation process. The involvement of the State Cleanup Section in these sites ensures that many previously unaddressed sites will be remediated. Sites may also enter the State Cleanup Program via other methods, including referrals from other IDEM and government offices, or calls from the public. See Chapter 5 for more information on the remediation program.

Voluntary Remediation Program

The Voluntary Remediation Program (VRP), established by the state legislature in 1993, provides a mechanism for site owners, operators, or potential purchasers to voluntarily enter into an agreement with IDEM to clean up contaminated property. See Chapter 5 for more information on the VRP.

Chemical Facility Anti-Terrorism Standards

The U.S. Department of Homeland Security (DHS) issued a final rule effective June 8, 2007 for chemical facility anti-terrorism standards under Title 6, Part 27 of the Code of Federal Regulations. The regulation requires any facility that manufactures, uses, stores, or distributes chemicals at or above the screening threshold quantity to complete and submit a top-screen analysis using the DHS chemical security assessment tool (CSAT). DHS estimates approximately 50,000 facilities will be affected. For more information or to download the CSAT Top-Screen User Manual, visit the Web at www.dhs.gov/xprevprot/programs/gc_1169501486197.shtm.

For More Information

Hazardous Waste Contingency Plans	IDEM - Office of Land Quality (317) 232-8941 or (800) 451-6027, ext. 2-8941 www.idem.IN.gov/5026.htm
Emergency Response	U.S. EPA's Emergency Response Web Site www.epa.gov/oem/index.htm